

## WHAT IS CLAIMED IS:

1. An engine performance demonstration unit, comprising:  
a mobile carrier;  
an engine mounted to said mobile carrier;  
aftermarket apparatus for use with said engine to affect the operation of said engine; and  
5 a switch mechanism for switching said aftermarket into operation and out of operation to  
thereby affect said engine accordingly.

2. The engine performance demonstration unit of claim 1, further including a visual display for visually showing the difference in operation of the aftermarket apparatus when operational and nonoperational.

3. The engine performance demonstration unit of claim 2, wherein said visual display comprised two visual displays, one visual display showing an engine performance parameter when the aftermarket apparatus is not operational, and a second visual display showing the engine performance parameter when the aftermarket apparatus is operational.

4. The engine performance demonstration unit of claim 2, wherein said visual display displays a flow rate of fuel to said engine.

5. The engine performance demonstration unit of claim 2, wherein said visual display displays a parameter related to a pollutant emitted by said engine.

6. The engine performance demonstration unit of claim 1, wherein said aftermarket apparatus comprises a magnet that influences the molecules of the fuel.

7. The engine performance demonstration unit of claim 1, wherein said switch mechanism comprises a valve for switching fuel.

8. The engine performance demonstration unit of claim 1, wherein said switch mechanism comprises an articulated mechanism for holding a plurality of magnet assemblies, said articulated mechanism is hinged for operation for moving said magnet assemblies into and out of magnetic influence with a fuel line.

9. The engine performance demonstration unit of claim 8, wherein said articulated mechanism includes a plurality of segments, each segment for attachment thereto of a respective magnet assembly, and each segment hinged to an adjacent segment by a hinge.

10 The engine performance demonstration unit of claim 1, wherein said mechanism comprises a carrier for holding said aftermarket apparatus in a position spaced apart from a fuel line and thus does not influence the fuel in said fuel line, and wherein said carrier is movable to a position wherein said aftermarket apparatus is adjacent said fuel line.

11. The engine performance demonstration unit of claim 10, wherein said aftermarket apparatus comprises a three-part magnet, each said bracket held is a respective metal frame.

12. The engine performance demonstration unit of claim 1, further including a branched fuel line comprising a valve for switching fuel to either of two branches, one branch having said aftermarket apparatus coupled therein, and the other branch coupling fuel directly from said valve to said engine.

13. The engine performance demonstration unit of claim 1, further including a catalytic converter switched into and out of operation with respect to exhaust gasses of the engine.

14. The engine performance demonstration unit of claim 1, further including a load that is switchable into and out of operation with respect to said engine, said load providing a resistance to a torque produced by said engine.

15. The engine performance demonstration unit of claim 1, wherein said mobile carrier comprises a wheeled trailer to which said engine is mounted for mobile movement.

16. A switch mechanism for moving a magnet assembly into proximity with a fuel line, comprising:

an articulated strip of moldable material, including segments hinged together, each segment for holding a magnet assembly;

5 one end of said articulated strip having a handle, and an opposite end of said articulated strip including a hinge connection; and

whereby when said handle is moved from a first position to a second position, said articulated strip articulates so that said magnet assemblies are wrapped around said fuel line.

17. The switch mechanism of claim 16, wherein said magnet assemblies are held to said articulated strip by magnetic attraction.

18. The switch mechanism of claim 16, wherein each said articulated segment has a shape conforming to a shape of said magnetic assembly.

19. The switch mechanism of claim 16, wherein said articulated strip includes three segments for holding respective three magnet assemblies, and wherein said articulated strip is formed so that the magnet assemblies are substantially equidistantly spaced around the fuel line when said articulated strip is moved to said second position.

20. The switch mechanism of claim 16, further including an engagement mechanism for latching said handle when moved to said second position.